DOCUMENT RESUME

ED 268 396 CG 018 954

AUTHOR Treiber, Frank A.; Shaw, Darlene
TITLE Acquired Immune Deficiency Syndrome (AIDS): Psychological Impact on Health Personnel.
PUB DATE Apr 86
NOTE 21p.; Paper presented at the Annual Convention of the American Association for Counseling and Development (Los Angeles, CA, April 20-23, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Attitudes; Diseases; *Nurses; *Physician Patient Relationship; *Physicians; *Psychological Patterns; Special Health Problems; *Stress Variables
IDENTIFIERS *Acquired Immune Deficiency Syndrome

ABSTRACT

Acquired Immune Deficiency Syndrome (AIDS) has been receiving considerable attention by the medical community as well as by the public. This attention is due to the rapid increase in cases of AIDS, the uncertain etiology of the disease, and the poor prognosis of the disease. Although some research has investigated the psychological impact of AIDS on its victims, little research has been conducted on the psychological impact of AIDS on the medical staff caring for AIDS patients. In an attempt to examine this impact, eight nurses and four physicians involved in the care of an AIDS patient and a matched, non-AIDS patient responded to four self-report measures which assessed the psychological distress associated with working with each patient. Compared to working with the non-AIDS patient, the physicians and nurses reported experiencing increased anxiety, greater interference in non-work activities, more frequent negative ruminations, and negative perceptions regarding the patient's behavior while working with the AIDS patient. These findings support previous anecdotal reports that medical staff do experience psychological distress when working with an AIDS patient. Because of the fears and concerns engendered in medical personnel by providing care to AIDS patients, psychological and educational interventions are needed to reduce staff's discomfort and thereby facilitate optimal care of AIDS patients. (Author/ABL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED268396

Acquired Immune Deficiency Syndrome (AIDS): Psychological Impact on Health Personnel

Frank A. Treiber, Ph.D.[1]

and

Darlene Shaw, Ph.D.[2]

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

[ ] Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Frank Treiber

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Key Words: AIDS, psychological impact

Running Head: Aids Impact

[1] To whom all correspondence should be addressed

Department of Psychiatry and Health Behavior

Medical College of Georgia, Augusta, Georgia, 30912

[2] Department of Psychiatry and Behavioral Sciences

Medical University of South Carolina and Veteran's Administration Medical Center

Charleston, South Carolina, 29425

CG 018954

BEST COPY AVAILABLE

ABSTRACT

Eight nurses and four physicians involved in the care of an AIDS patient and a matched, non-AIDS patient responded to four self-report measures which assessed the psychological distress associated with working with each patient. Compared to the non-Aids patient, the physicians and nurses experienced increased anxiety, greater interference in non-work activities, more frequent negative ruminations and negative perceptions regarding the patient's behavior while working with the AIDS patient. Because of the fears and concerns engendered in medical personnel by providing care to AIDS patients, psychological and educational interventions are needed to reduce staff's discomfort and thereby, facilitate optimal care of AIDS patients.

Over the past several years Acquired Immune Deficiency Syndrome (AIDS) has been receiving considerable attention in the medical community as well as in the general public. A number of explanations can account for the continuous increase in concern over AIDS. First, the incidence rate has been significantly increasing over the past several years, and it appears that this pattern will continue. For instance, using the definition of the Center for Disease Control (CDC), by September, 1983, a total of 2,259 cases had been reported to the CDC (Brenner, 1983) and appeared to be doubling every six months (Nichols, 1983). In fact, as of January 1984, a total of 3,280 cases - (Selik, et al. 1984) had been reported to the CDC from across the United States.

In addition, a second factor which has precipitated concern with AIDS is that the exact etiology is not completely understood (Martin and Vance, 1984). Furthermore, there have been a number of risk factors associated with AIDS with possible suggestions of means of acquisition (Brenner, 1983). Approximately 71% of the AIDS patients are homosexual or bisexual men with or without a history of intravenous drug use. The remainder of this population is comprised of heterosexuals with the history of intravenous drug use (17%), hemophiliacs (1%), Haitians (5%), and individuals with no known risk (6%)(Popkin, Madden, Lavrich, and Sherlock, 1983). Probably the most concerning factor which has received much attention is the poor prognosis of the disease. Less than 25% of individuals have lived longer than 1 1/2 to 2 years following diagnosis of AIDS with no one having survived the illness (Popkin et al. 1983).

These facts presented above have had significant psychological impact on individuals diagnosed with AIDS as well as those associated with them (Rubinow, 1984). However, as noted by Nichols (1983), there is significant lack of psychiatric literature addressing the psychosocial impact of AIDS. With regards to the patient's psychological adjustment to AIDS the seminal work has been conducted by Nichols (1983), and Forstein (1984). Nichols (1984) has found that AIDS patients typically experience psychological responses similar to those Kubler-Ross (1969) observed in dying patients, but that AIDS patients responses are typically more intense and labile. Specifically, Nichols, (1984) has found that most patients experience feelings of shock shortly followed by engagement in a denial system. Following that, no predictive sequence is usually noted with intermittent feelings of anger, bargaining, resignation, fear, anxiety, and guilt all being observed. On the other hand, Forstein (1984) has observed more clearly defined stages of emotional reaction with many of their AIDS patients. Initially, patients experience reactions of shock followed shortly followed by denial. Forstein (1984) maintains that following the denial stage the patient enters a period of questioning "why me" with bargaining often being a part of this stage. Finally, the patients often enter a final stage of grappling with acceptance of their poor prognosis and attempting to prepare themselves for the inevitable. Not all patients encounter these specific sequences of stages and changes in physical status may result in regression or progression of these stages

(Forstein, 1984). For instance, at any point the patient may encounter a sense of loss of control over his life due to drastic changes in lifestyle (e.g., frequent hospitalizations, decreased social and sexual interactions). A continuous increase in feelings of isolation are noted by many of the patients. This tends to be reinforced by family members, friends and health care personnel, all of whom may tend to distance themselves physically and/or emotionally from the patient. As the illness progresses, depression can develop as a result of a continued deterioration of the patient's physical status and the associated psychosocial adjustment problems.

It should be noted that the patient's emotional adjustment is often affected by the family's adjustment to the illness. For some families it is their first direct exposure and/or recognition of their relative's homosexuality and/or IV drug use and they may abandon the patient because of their rejection of his personal lifestyle rather than their fear of the illness itself (Housman, 1984). In fact, a report by Holtz, Dobro, Spalinks, Kapila, and Oleske (1983) indicated that AIDS patients with longer survival rates have been those whose families have been strongly committed to the patient's physical and emotional well being.

Psychiatric intervention has been shown to be extremely valuable in helping AIDS patients and associated individuals in their psychosocial adjustment throughout the course of the illness. However, given that AIDS is a relatively "new" disease, little psychiatric intervention literature has been published. Again the seminal work is that of

Nichols (1984). He has found a number of therapeutic techniques successful in helping the AIDS patient cope more effectively. Primary approaches have been those of individual counseling (Miller and Green, 1985) and support groups (Morin, Charles, and Malyon, 1984; Newmark, 1984). This has been found to be most helpful in that some of the AIDS patients have been abandoned by their biological family or loved ones and the groups aims to develop a much needed social support system.

Support groups have also focused upon the "worried well" (i.e., family members, friends, lovers). Such groups are reported to be helpful in promoting psychological adjustment amongst family and friends which in turn helps with the establishment and/or growth of the patient's social network (Morin et al. 1984).

Nichols (1984) also maintains that psychiatry may prove helpful in assuring that the patient receives adequate medical treatment by helping to alleviate medical personnel's exaggerated fears, anxiety, and personal bias in working with AIDS patients. One means of accomplishing this is by being available for discussion of these sensitive issues, as well as being a provider of educational information which may serve to alleviate many of their concerns. The need for provision of support and educational information to hospital workers appears warranted. There are numerous anecdotal references to situations in which AIDS patients have been denied placement in hospitals or nursing homes, refused treatment by certain medical personnel and/or received less than adequate medical care (Holtz et al. 1983). Simmons, Alling (1984) noted

reports of nursing personnel resigning or requesting additional salary if required to work with AIDS patients. Much of medical personnel's concerns about working with AIDS patients appears to be related to the possibility of transmission of the illness (Holtz et al. 1983, Nichols, 1984; Reese, 1985). However, these concerns appear to be unwarranted given the current data with regards to transmission of AIDS. That is, there has been no evidence of contagion via air, water, food, or normal social contact (Rubinow, 1984).

To date, there has been little systematic effort to determine medical staff's psychological adjustment to working with an AIDS patient. Such information would help determine specific areas in which psychiatry can prove more effective in aiding hospital staff's psychological adjustment, which in turn will help the AIDS patient receive optimum medical treatment. Thus, the intention of the present study was to assess the psychological impact upon medical staff of working with an AIDS patient.

Study Procedure

The approach taken to assess this issue was to have medical staff compare their emotional reactions to working with an AIDS patient with their reactions to another patient who was closely matched for age, race, sex, educational level, socioeconomic status, physically symptomatology, and duration of hospitalization. A comparison of these

demographic variables is presented in Table 1.

Insert Table 1

Medical staff that were involved in the care of both patients over the same period of time were asked to respond to 4 self-report measures, assessing the psychological distress associated with working with each patient. Everyone approached consented to participate with the exception of 2 nursing staff members. It is worth mentioning that these 2 individuals were noted by their supervisor as experiencing the most difficulty and anxiety in working with the AIDS patient. Apparently they seemed to be concerned that these measures would verify their discomfort and as a result felt they would be perceived as incompetent. As a result, the subject sample was comprised of 8 nursing personnel (all female, 6 white, age range = 31-48 years, two black, 37 and 44 years old) and 4 medical doctors (all white, one 29 year old female resident, one male attending, one male resident and one male medical student; age range = 29-38 years). Using a counterbalanced procedure, the medical personnel completed the set of self-report measures once with regard to the AIDS patient and once with regard to the non-AIDS patient.

Instruments

State scale of the Speilberger State Trait Anxiety Inventory. (SAI) Speilberger, Gorsuch, and Lushene (1970). The SAI is a 20 item

likert rating scale assessing the adult's perception of their current levels of anxiety/general distress. The SAI has adequate reliability (r = .20 to .40 for state scale) and concurrent validity (r = .75 with IPA anxiety scale).

Modified Impact of Event Scale (MIOE) (Horowitz, Wilmer and Alverz (1979). The MIOE is a 15 item likert rating scale assessing the individual's emotional responses to stressful life events. For purposes of the current study the questions were reworded to directly assess the stressful event of working with an AIDS patient. Two factors, intrusion and avoidance are combined to form a total distress score which was the only dependent measure used in the present study. The scale has adequate test-retest reliability (r = .87 for total distress score, r = .89 for intrusion subscale and r = .79 for avoidance subscale).

Behavior Upset in Medical Patient's Scale (BUMP) (Zeldow and Braun, 1983). The BUMP is a 32 item likert rating scale of behaviors which nonpsychiatric medical patient's might show in the medical setting (e.g., impatience, irritability, uncooperativeness, withdrawal and depressive symptomatology). Adequate reliability has been determined (internal consistency alpha coefficient =.93, test-retest, r = .66). Construct validity also has been partially demonstrated via factor analysis with 213 hospitalized adult patients in which 4 factors were determined including behavioral reggression, poor patient staff relations, depression/anxiety, and withdrawal. For purposes of the present study a total behavioral upset score was used to determine the

staff's perception of the patient's overall level of behavioral difficulties.

Modified Coping Health Inventory for Parent's (MCHIP) (McCubbin, McCubbin, Patterson, Cauble, Wilson, and Warwick, 1983). The CHIP is a 45 item self-report likert rating scale designed to assess parent's reports of coping strategies useful in the management of family life with a chronically ill child. Three specific coping patterns were identified via factor analysis in the CHIP including: 1) maintance of family integration in definition of the situation, 2) maintance of social support, self-esteem and psychological stability, and 3) comprehension of the medical situation via communication with other individuals and medical staff. Adequate reliability has been determine for the scale (internal consistency for the three coping patterns, range =.71 to .79). Concurrent validity has been established with families of cystic fibrosis children. For instance, significant correlations have been noted between the CHIP and improvements in the child's physical health, and adaptive family functionings. The CHIP was modified (MCHIP) such that questions related to how the individual and his/her family system effectively cope with the fact that a family member is working with an AIDS patient.

Results

Initially, overall differences were assessed in staff's psychological adjustment to working with the AIDS patient compared with the nonAIDS control patient. The medical staff's average responses to working with an AIDS patient versus a control patient on all four

self-report measures are presented in Table 2. The findings indicated that the AIDS patient had a greater negative impact upon the staff's emotional adjustment than the control subject. Dependent t-tests revealed significant differences on three of the four measures, with the AIDS patient associated with more emotional discomfort on all measures. For instance, on the BUMP, the AIDS patient was perceived as generally

---

Insert Table 2 about here

---

being more difficult to manage and characterized as being more demanding and resistant, and at times, withdrawn and nonresponsive during routine medical procedures (AIDS patient mean = 61.17 versus nonAIDS patient mean = 20.17), $t\ (11) = 5.62$, $p < .001$. On the other hand, the nonAIDS patient was perceived as being very cooperative, talkative and pleasurable to work with during the same medical procedures. It should be noted that during the time the questionnaires were completed two medical staff members not involved in the direct care of the patients did not perceive the two patients as behaving noticeably different during routine medical procedures based upon the BUMP. The results of the SAI found the medical staff to be much more anxious while working with the AIDS patient (AIDS patient mean = 47.33 versus nonAIDS patient mean = 30.00), $t\ (11) = 4.07$, $p < .01$. Finally, the MIOE indicated that working with the AIDS patient, compared to the nonAIDS patient, led to staff having more frequent ruminations, worrying, and interference in

non-work related behavior primarily related to concerns about their potential contraction and spread of the AIDS virus to family and friends (AIDS patient mean = 32.75 versus nonAIDS patient mean = 21.75), t (11) = 4.80, $p < .001$.

Following the above assessment of overall differences in working with the AIDS versus the nonAIDS patient, more specific analyses were conducted. The average responses between the two groups of medical staff (i.e. nursing staff, physicians) are presented for each self-report measure on both patients in Table 2. Although noticeable mean differences were noted between medical doctors and nursing staff on these measures, due to the small sample size of doctors (i.e., $n = 4$), a significant difference was noted on only one comparison. This was on the SAI comparison in working with the nonAIDS patient. The medical doctors were found to be more anxious than nursing staff (mean scores = 36.75 versus 26.63), t (10) = 2.71, $p < .02$.

Further analyses were conducted to determine how the two groups were individually affected in working with the AIDS patient versus the nonAIDS patient. Dependent t-tests revealed a significant difference in the medical doctors' responses on the BUMP with them finding the AIDS patient more difficult to complete routine medical procedures on due to behavioral uncooperativeness, obstinance and depressive withdrawal (df =

1, $p < .05$). However, nursing staff was noted as being much more emotionally distressed in working with the AIDS patient versus the nonAIDS patient as noted on three of the four measures. Significant differences were observed on the MIOE (AIDS patient mean score = 33.5 versus nonAIDS patient mean score = 22.25), df = 7, 3.52, $p < .01$. The SAI indicated that the nursing staff was much more anxious with the AIDS patient (i.e., AIDS patient mean score = 51.25 versus nonAIDS patient mean score = 28.57), df = 7, 4.12, $p < .01$. Finally, nursing personnel perceived the patient as being much more difficult to manage as observed on the BUMP (AIDS patient mean = 66.25 versus nonAIDS patient mean = 19.75), df = 7, 4.62, $p < .01$.

Discussion

Overall, the findings of the present study support previous anecdotal reports (e.g., Holtz et al. 1983; Nichols, 1984; Rosse, 1985) that medical staff do experience psychological distress when working with an AIDS patient. The psychological discomfort quantified in this study may partially account for situations in which AIDS patients have been refused treatment and/or received less than adequate medical care (Holtz, et. al., 1983; Nichols, 1984). Collectively the medical staff's responses indicated that they experience distress in both their work and nonwork settings. In the work setting, they experienced increased anxiety, especially during direct contact with the patient. They also had more negative perceptions regarding the AIDS patient's behavior during routine medical procedures (e.g.,

hemodialysis, vital signs). In nonwork settings, medical personnel experienced increased ruminations primarily involving worry and concern over contraction of the illness, and the intrusion of undesired thoughts, and/or mental images of previous experiences in working with the patient (e.g., blood drawing). Anecdotally, medical staff also indicated experiencing frequently unsuccessful efforts to avoid such ruminations and thought intrusions as well as an active avoidance of discussions of their feelings and concerns with family or friends.

Specific comparisons of medical staff indicated that the nursing personnel were much more adversely affected by the AIDS patient than the nonAIDS patient. That is, they were more anxious while working directly with the patient, experienced frequent ruminations and thought intrusions about various issues related to AIDS patients, and encountered much difficulty in performing regular medical treatment interventions with the patient due to their perceptions that he was much more obstinant, noncompliant and at times extremely dependent and withdrawn compared to the control patient. There are a number of potential reasons why nursing staff was more adversely affected than the medical doctors. First, based upon the nursing staff's responses on the modified Impact of Event Scale, as well as discussions with them, it appeared that much of their anxiety and distress was related to possible contraction of the illness. It should be noted that the nursing personnel were not familiar with the current information concerning the difficulty of contraction of the illness.

Specifically, the fact that at the time the study was conducted tens of thousands of health care workers had worked with these patients with none having contracted the illness (Brenner, 1983). Furthermore, medical doctors were all familiar with this information which probably served to alleviate some of their anxieties. Barrett-Connor (1984) also found that physicians were quite knowledgeable about AIDS with regards to epidemiology, etiology, presentation and prognosis. Second, nursing staff were the ones primarily responsible for much of the direct contact with the AIDS patient and with exposure to body secretions and blood.

These findings indicate that psychiatry can be of potential benefit in serving as a consultation/liaison source with medical staff to alleviate psychological distress associated with working with AIDS patient. Nichols (1984) has suggested that one means of providing support is to provide a setting for the staff to discuss their emotional distress and concerns about various issues involving the AIDS patient. Another possible means of helping the staff adjust more effectively is to provide educational information specifically related to their work situation. We have found both of these approaches to be very helpful in alleviating the distress medical staff were previously experiencing. This was accomplished by both individual impromptu sessions with medical personnel at points in time in which they were experiencing high levels of distress, as well as via a brief formal presentation in which general information was provided to the staff and patient's family concerning epidemiology, contraction, probable etiology, and prevention via

precautionary procedures (CDC guidelines). Careful effort was made to present CDC guidelines such as use of gowns and gloves when in direct contact with a patients' blood or body fluids in such a manner that logical precautionary steps were taken without going to extremes or creating unnecessary concerns (Papkin et al. 1983). Information was also provided concerning the kinds of psychological distress frequently encountered by the patient and those involved with the patient, especially medical staff and family members or friends who frequently visit the hospital. Through these efforts we found that much of the medical staff's anxieties and concerns were alleviated with subsequent increases in their reported ability to more effectively manage the patient, as well as his family.

In summary, these findings do indicate that medical personnel may experience psychological discomfort in working with an AIDS patient. This distress may be expressed in both overt and covert manners at both work and nonwork settings. Psychiatry can be of potential benefit in alleviating some of these difficulties resulting in better patient/staff relationships and more effective medical treatment. Further research is warranted to determine the specific effects of educational and psychological intervention upon the medical staff's adjustment to working with AIDS patients. Finally, to optimize the medical care of the AIDS patient, efforts need to focus upon psychosocial adjustment from an all inclusive perspective involving the patients, their family and friends, and medical personnel.

REFERENCES

Brenner, E. (1983) Update on the Acquired Immune Deficiency Syndrome - A new Immune Deficiency Syndrome. Preventive Medicine Quarterly, 7, 1-8.

Forstein, M. (1984) The Psychosocial Impact of the Acquired Immune Deficiency Syndrome. Seminars in Oncology, 11, 77-83.

Hausman, K. (1983) Treating victims of AIDS poses challenge to psychiatrists. Psychiatric News, August 5, 1-9

Holtz, H., Dobro, J., Palinkas, R., Kapila, R., and Oleske, J. (1983) Psychosocial impact of Acquired Immune Deficiency Syndrome. Journal of American Medical Association, 250, 167.

Horowitz, M., Wilner, N., and Alvarez, W. (1979) Impact of event scale: A measure of subjective stress. Psychosomatic Medicine, 41, 209-218.

McCubbin, H.I., McCubbin, M.A., Patterson, J.M., Cauble, A.E., Wilson, L.R., and Warwick, W. (1983) CHIP - Coping health inventory for parents: An assessment of parental coping patterns in the care of the chronically ill child. Journal of Marriage and the Family, 45, 359-370.

Martin, J.L., & Vance, C.S. (1984) Behavioral and psychosocial factors in AIDS: Methodological and substantive issues. American Psychologist, 39, 1303-1308.

Nichols, S.e., Jr. (1983) Psychiatric aspects of Aids. Psychosomatics, 24, 1083-1089.

Nurnberg, H.G., Prudic, J., Fiori, M., and Freedman, E.P. (1984) Psychopathology complicating Acquired Immune Deficiency Syndrome (AIDS). American Journal of Psychiatry, 141, 95-96.

Price, J.H., Desmond, S., & Kukulka, G. (1985) High school students' perceptions and misperceptions of AIDS. Journal of School Health, 55, 107-109.

Rubinow, D.R. (1984) The Psychosocial impact of AIDS. Topics in Clinical Nursing, July, 26-30.

Selik, R.M., Haverkos, H.W., Curran, J.W. (1984) Acquired Immune Deficiency Syndrome (AIDS) Trends in the United States, 1978-1982. American Journal of Medicine, 76, 493-500.

Speilberger, C.D., Gorsuch, R.C., & Lushene, R.E. Manual for the State-Trait Anxiety Inventory. Palo Alto, California: Consulting Psychologists Press, 1970.

Zeldow, P.B., & Braun, L. (1983) The BUMP: A measure of behavioral upset in medical patients. Presented at the annual meeting of the American Psychological Association, Anneheim, California.

Table I

DEMOGRAPHIC VARIABLES FOR THE AIDS PATIENT AND NON-AIDS PATIENT

Variable	AIDS Patient	Non-AIDS Patient
Age	42	46
Race	Black	Black
Education	High School	9th Grade
Sexual Orientation	Heterosexual	Heterosexual
Length of Hospitalization at Time of Study	3 months	3 months
Medical Treatments	Hemodialysis 3 Times Weekly Opportunistic infections (e.g., candidiasis, pneumocystis carinii pneumonia, pulmonary crytococus)	Hemodialysis 3 Times Weekly
Medical Diagnoses	Hypertension History of IV Drug Abuse	Hypertension

Table 2

Comparison of Nursing Staff and Medical Doctor's Self Report Ratings (Means)

		Medical Staff Affiliation		
Measure	Patient	Nursing		Medical Doctor
Modified Coping Health Inventory (MCHI)	Aids	57.88		33.75
	NonAids	59.57		41.25
Modified Impact of Event Scale (MIOE)	Aids	35.14	>**	31.25
	NonAids	22.86		20.75
Spielberger State Anxiety Inventory (SAI)	Aids	50.71	>**	39.50
	NonAids	28.57	→	36.75 **
Behavioral Upset in Medical Patients (BUMP)	Aids	69.57	>***	48.50 >*05
	NonAids	19.14		21.00

*significant at P < .05
**significant at P < .02
***significant at P < .01